INVASIVE PLANT RISK ASSESSMENT Sitkoh Lake Trail Reconstruction

Sitka Ranger District Tongass National Forest

Prepared by: <u>/s/ Rick Turner</u>	Date: <u>September 19, 2017</u>
Ecologist	

INTRODUCTION

The proposed project would fully reconstruct the entire length of Sitkoh Lake Trail from saltwater to the East Sitkoh Lake recreation cabin along the existing trail prism. Depending on the native surface, the tread will be a combination of native material, imported gravel, and boardwalk. Log stringer bridges and other failing trail structures will be reconstructed and additional drainage features such as waterbars and drain dips will be added where needed. A short (approximately 14 mile) user created spur route between the Sitkoh Lake trail and road 75443 will also be improved by hardening the tread with gravel and boardwalk.

Survey and design is scheduled for 2018 with construction to follow in 2019. The construction phase could last for more than one year and would be dependent on funding.

INVENTORY

Plant field surveys were conducted in the project area in 2009 and 2011. The following invasive plant infestations have been documented in the project area in the immediate vicinity of the East Sitkoh Lake Cabin: reed canarygrass (0.1 acre); common plantain (less than 0.001 acre), and Kentucky bluegrass (less than 0.001 acre). On the Tongass National Forest, reed canarygrass is considered a high priority for treatment, but only in certain locations.

HABITAT VULNERABILITY

Soils in the project are mostly mineral soil or organic peat over mineral soil or bedrock. If vegetation cover is removed, exposed soils can become infested by invasive plants. The main vegetation types in the project area is mixed hemlock-spruce forest and forested/nonforested muskeg. Because project activities will mainly occur on existing trail infrastructure, natural vegetation in the project area will remain undisturbed, which will inhibit infestation of most invasive species. Ground-disturbance in the immediate vicinity of the recreation cabin could potentially increase the risk of spread of existing infestations in the area.

NON-PROJECT DEPENDENT VECTORS

The trail is used for fishing access, remote hiking, hunting, and nature viewing. Recreational impacts are currently limited mostly to the immediate trail corridor. Invasive propagules could be imported inadvertently by trail users. However the likelihood of infestation is low because of

the low amount of use and the intact natural vegetation in the project area will inhibit infestation of most invasive plants.

HABITAT ALTERATION EXPECTED AS A RESULT OF THE PROJECT:

The effects of implementation of this project on alteration of habitat are expected to be similar to current conditions. All project activities will occur in areas that have already been altered by trail construction and use. Reconstruction of the trail crossings will disturb a minor amount of existing natural vegetation and expose or re-expose mineral soil. Some limited ground disturbance may occur on or adjacent to the existing trail route and recreation cabin during reconstruction.

INCREASED VECTORS AS A RESULT OF PROJECT IMPLEMENTATION:

Construction equipment and tools, as well as any imported construction materials such as soil, gravel, or seed for rehabilitating disturbed areas could serve as vectors for introduction of invasive plants into areas of project activity, which could spread to other areas including the rest of the existing trail corridor.

MITIGATION MEASURES (PREVENTION AND CONTROL):

Project-specific measures to be implemented to mitigate the introduction and spread of invasive plants include the following:

- 1. Ground-disturbance in or near invasive plant infestations in the vicinity of the East Sitkoh Lake cabin should be avoided. If it cannot be avoided, the infestations should be treated before disturbance, and any resulting overburden and waste material should be either be stored in place or properly disposed of in a landfill.
- Use only certified weed-free gravel and other construction materials if available. All gravel and other materials should be inspected for the presence of invasive plants before transporting to the project area.
- Prevent invasive plant establishment during construction by washing tools and equipment prior to first entering the project area or when re-entering from an area infested by invasive plants.
- 4. Use coconut fiber matting for erosion control as an alternative to straw bales when available and practical.
- Revegetate bare soil resulting from project activity if prompt natural regeneration is not expected. Use native material when available. See Tongass NF current seeding guidelines for detailed procedures and appropriate mixes.
- 6. Inspect areas where gravel or other materials (including seed) have been imported within 2 years after project completion to ensure no invasive plants are present

SUMMARY

The overall risk of invasive plant establishment from implementation of this project is low if all recommended mitigation measures are implemented, and moderate if they are not or only partially implemented. This determination is based on the following:

- 1. The current inventory of invasive plants indicate no infestations of high-priority invasive plants in or near the project area.
- 2. Current habitat vulnerability is low, and non-project dependent vectors present a low risk.
- 3. Habitat alteration expected as a result of the project (re-exposure of mineral soil) presents a moderate risk, but only in small areas that should recover to natural vegetation quickly.
- 4. Increased vectors as a result of project implementation presents a moderate risk but only during facility construction.
- 5. Implementation of mitigation measures will reduce moderate risk from increased vectors due to project implementation to low.